

8. What is the difference between a target, goal, criteria, and standard?

A: A water quality standard is made up under the Clean Water Act of three different components - designated uses of the water body (e.g., recreation, water supply, aquatic life, agriculture), water quality criteria to protect designated uses (numeric pollutant concentrations and narrative requirements), and an antidegradation policy to maintain and protect existing uses and high quality waters. The rule which EPA finalized provides the numeric criteria necessary to assure attainment of Florida's narrative nutrient standards. Those criteria are sometimes referred to as goals or targets, because the criteria are not themselves independently enforceable. A total maximum daily load (TMDL) also commonly includes a component referred to as a target. In the case of TMDLs, the target reflects an endpoint for deriving the TMDL reductions, and is based on a demonstration that the target will meet the water quality criteria for a waterbody.

The new criteria do not independently create new legal obligations on point sources or non-point sources. Criteria have to be implemented through the state's existing water quality programs which, in this case, are implemented by the Florida Department of Environmental Protection (FDEP). FDEP uses criteria in its 303(d) impaired waters program, TMDL and BMAP program, and NPDES permitting program.

9. Would you explain in greater detail how the reference conditions were selected to establish the values for the numeric criteria for each of the regions?

A: Please refer to the preamble itself and also to the technical support document which is available on the website for a detailed description of the reference condition approach. A brief summary follows.

For the reference condition approach, EPA used a large amount of high-quality scientific data available on TN and TP concentrations with corresponding information on land use and human disturbance for a wide variety of stream types. To define the reference population, EPA used the least-disturbed benchmark reference condition approach initially developed by FDEP to define the reference condition population. This approach starts with a query of FDEP's data in the STORET (STORage and RETrieval) and GWIS (Generalized Water Information System) databases and identified sites with data that met quality assurance standards. Sites with data were then evaluated by FDEP to assess the level of human disturbance in the vicinity of the site. Following proposal and in response to additional comments and information, EPA further evaluated the benchmark sites and screened out additional sites. EPA used available data to identify a population of least-disturbed benchmark locations (benchmark sites). EPA used associated measurements of TN and TP concentrations from the benchmark sites and SCI sites (in the case of the West Central region) as the basis for deriving the final numeric degree of potential human impact. Based on this review, sites that FDEP determined had potential human impact were removed. These additional screens provide greater confidence that the remaining sites are both least-disturbed and biologically healthy. The benchmark approach resulted in the identification of only one WBID as least-disturbed within the West Central region. For this reason, EPA is utilizing the SCI sites identified at proposal to define the reference population for the West Central region in this final rule. EPA grouped the remaining sites (hereinafter referred

to as “reference sites”) according to its Nutrient Watershed Regions (Panhandle West, Panhandle East, North Central, West Central, and Peninsula). For each NWR, EPA compiled stream data (TN and TP concentrations) from the reference sites.

10. Who will be determining the downstream protection values? When will downstream protection values be calculated?

A: The rule provides that EPA or FDEP can determine downstream protection values (DPVs). EPA’s expectation is that FDEP will generally be making the determination in close coordination with EPA. The DPVs will be determined as they are needed – at the time of a waterbody assessment, TMDL, or permit issuance.

11. Why use the exceedance frequency associated with toxics? Wouldn’t something more like 25% exceedance be more appropriate for nutrients?

A: Ambient water quality criteria contain the following three components: magnitude, duration, and frequency. The magnitude varies depending on the waterbody type or region. The criterion-duration is expressed as an annual geometric mean and the criterion-frequency is expressed as a no-more-than-one-in-three-years excursion frequency for the annual geometric mean. The use of the annual geometric mean as the duration component of the criteria is consistent with the data set used to derive these criteria, which applied distributional statistics to measures of annual geometric mean values from multiple years of record. As for frequency, EPA has determined that a no-more-than-one-in-three frequency of excursion is consistent with the time frame associated with stream ecosystem recovery from disturbance and, therefore, will not result in unacceptable effects on aquatic life.

12. The current narrative standard states that in no case can nutrients cause an imbalance in flora and fauna. The new nutrient rule says the criteria have to be exceeded on an annual average two years in three in order to have a problem. Isn’t the new rule a weaker protection level than the current narrative criteria based on this difference?

A: The narrative and numeric criteria will both apply to Florida waterbodies. EPA believes that one exceedance in three years is an appropriate interpretation of Florida’s narrative criteria and is equally protective.

13. How is EPA reviewing other parameters associated with eutrophication (e.g. pH, secchi depth or turbidity)?

A: This particular rule interprets one specific provision of the Florida narrative requirements in subsection 62-302.530(47)(b) of the Florida Administrative Code. The provision provides that in no case shall nutrient concentrations of a body of water be altered so that they cause an imbalance in natural populations of aquatic flora or fauna.

To interpret that particular part of the narrative standard, EPA considered chlorophyll A, nitrogen and phosphorus for lakes and we considered nitrogen and phosphorus for streams. Florida has criteria for pH and transparency that are also applicable to these waterbodies.

14. Will there be any effect on existing FDEP approved basin management action plans (BMAPs)?

A: The basin management action plans (BMAPs) are based on TMDLs. Once this rule is effective, the new criteria will be utilized through the normal FDEP process of implementing the Clean Water Act programs, including the TMDL process.

FDEP will examine waters in light of these criteria to determine if the waters are impaired. If they are impaired, they will be placed on the 303(d) impaired waters list. FDEP would determine the priority for revisiting existing TMDLs for any waters that were listed based on the new criteria. If a BMAP is in place, then FDEP would determine whether revisions are needed to the BMAP.

EPA has been extremely supportive of the BMAP approach that Florida has used. At this time EPA does not believe that modifications are needed to any of the approaches, allocations, or pollution control techniques that are embodied in those BMAPs. EPA believes that FDEP should be moving forward in implementing those plans and making revisions, if necessary, in the future.